

U.S. Patent Application No. 10/534,304 I.A. filed 12 November 2003 Attorney Docket No. D4695-00133 "Monolithically Integrated Vertical Pin Photodiode used in BiCMOS Technology" Express Mail Label No. EV771955929US REPLACEMENT SHEET

Fig. 1

1/2

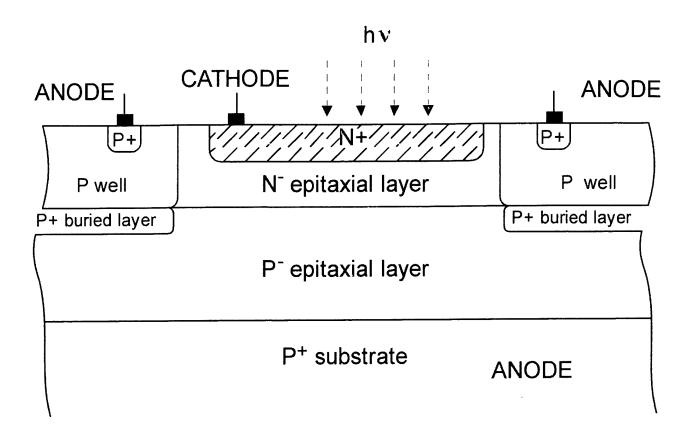


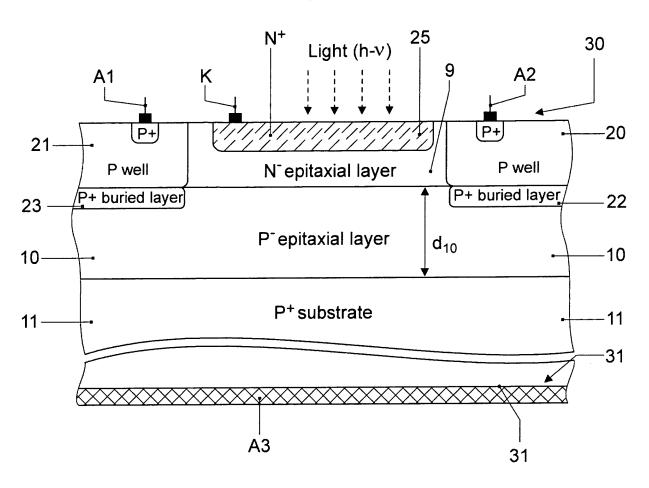
Table 1

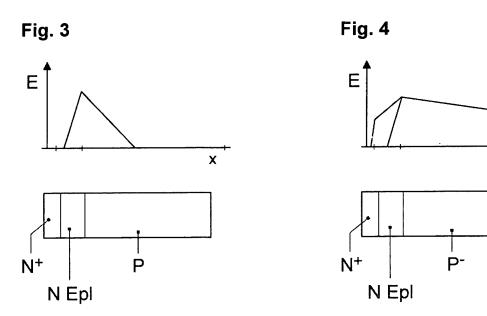
optical wavelength λ	standard process		modified Process	
	670 nm	785 nm	670 nm	785 nm
quantum efficiency η (%)	94.3	71.3	96.5	63.4
sensitivity R (A/W)	0.508	0.450	0.520	0.400
rise time t _R (ns)	3.00	12.40	0.610	1.465
fall time t _F (ns)	6.50	10.40	0.515	1.480
3dB bandwith BW (MHz)	79.3	30.8	625	238
capacitance C _D (fF/µm²)	0.134	0.134	0.0105	0.0105

Fig. 2

REPLACEMENT SHEET

2/ 2





Х

P+